



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of

GODWIN D. ZWANENBURG

Serial No. 09//678,457

Filed: OCTOBER 3, 2000

DEVICE FOR REGENERATING AN ION EXCHANGE CARTRIDGE

Commissioner for Patents
Washington, D.C. 20231

Atty Docket

PHN 17665

Group Art Unit: 1724

Examiner: I. CINTINS

APPEAL BRIEF

Sir,

This is an appeal from the Final Office Action of
December 4, 2002. A Notice of Appeal was filed March 4,
2003.

1. REAL PARTY IN INTEREST

The real party in interest is the assignee, U.S. Philips
Corporation, a Delaware corporation. N.V. Philips
Electronics, a corporation of the Netherlands, is the
ultimate parent of U.S. Philips Corporation.

2. RELATED APPEALS AND INTERFERENCES

There are no other appeals or interferences, known to the Applicants or the assignee, that would in any way directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

3. STATUS OF CLAIMS

The claims standing in this case are 1-9. Claims 1-3 have been cancelled without prejudice. Claims 4-9 are on appeal.

4. STATUS OF AMENDMENTS

No Rule 116 Amendment affecting the claims has been filed.

5. SUMMARY OF THE INVENTION

As shown on page 1, line 1 - page 2, line 30 of the specification and as defined by the claims on appeal, the invention in this case is directed to a device or regenerating an ion exchange cartridge having an inlet and an outlet

As shown on page 1, lines 5-14 of the specification, it is known to use such cartridges to prevent the deposition of scale in domestic appliances in which tap water is heated. As further shown in this portion of the specification, these cartridges, which prevent the formation of scale by the removal of scale-forming ions from the water, must be replaced from time to time with fresh cartridges, depending on the hardness of the water.

As shown on page 1, lines 17-20 of the specification, it is an object of the invention to provide a device with which the user of the domestic appliance can regenerate the appliance in a simple manner hereby allowing the cartridge to be reused.

According to the invention as described on page 1, line 23 - page 2, line 30 of the specification and as defined by the claims on appeal, a device for regenerating an ion exchange cartridge having an inlet and an outlet, which device has a reservoir for the accommodation of a solution containing alkali metal ions and chloride ions and which reservoir has an outlet to which then inlet of the cartridge can be connected. Further, according to the invention, the device is provided with a chamber in which the cartridge can be placed, the chamber having an inlet directly connected to the outlet of the reservoir and an outlet and the inlet and the outlet of the chamber being coupled to the inlet and the

outlet respectively of the cartridge when the cartridge is placed in the chamber. Additionally, according to the above-noted description of the invention and as defined by the claims on appeal, a restriction is provided in the flow path of the solution is provided in the flow path of the solution situated between the outlet of the reservoir and the outlet of then chamber for the cartridge.

According to an embodiment of the device of the invention, described on page 2, lines 22-23 of the specification and defined by Claim 5, the restriction is a spring-loaded non-return valve.

According to a further embodiment of the device of the invention, described on page 2, lines 24-26 of the specification and defined by Claim 6, in the operational condition of the device the outlet of the reservoir lies at a higher level than the outlet of the chamber.

According to a still further embodiment of the device of the invention, described on page 2, lines 27-30 of the specification and defined by Claim 7, a filter is present in the flow path of the solution situated between the outlet of the reservoir and the inlet of the chamber.

According to a further embodiment of the device of the invention, described on page 3, lines 13-15 of the specification, shown in Fig. 3 of the drawing and defined by

Claim 8, the outlet of the chamber is provided with a discharge tube.

The invention is described in greater detail on page 2, line 34 - page 4, line 7 of the specification with reference to the figures of the drawing in which

Fig. 1 is a perspective view of the device according to the invention,

Fig. 2 is a cross-section taken on line II-II of the device of Fig. 1,

Fig. 3 is a cross-section taken on line III-III of the device of Fig. 1 and

Fig. 4 is a cross-sectional view of the ion-exchange cartridge.

6. ISSUES

The issues in this case are whether Claims 4-9 are rejectable under 35 U.S.C. 102(b) as anticipated by Scholer.

7. GROUPING OF THE CLAIMS

Claims 4-9 are considered to be patentable for similar reasons and stand together.

8. ARGUMENT

The rejection of Claims 4-9 under 35 U.S.C. 102(b) as anticipated by Scholer is considered to lack merit.

Scholer is not considered to teach, or even suggest, the device defined by even Claim 9, the most generic claim

Unlike the device defined by Claim 9, the device of Scholer is not shown therein to regenerate an ion-exchange cartridge. Instead, the device of Scholer is shown, in column 2, lines 8-34, to regenerate insoluble particles of a zeolite, an ion-exchange material.

Additionally, unlike the device defined by Claim 9, in the device of Scholer there is no restriction located in the flow path of the regenerating solution situated between the outlet (46) of the reservoir (regenerant container 22) and the outlet (46) of the chamber (16) holding the particles of ion-exchange material (17). Instead, as shown in Fig. 14 and column 6, lines 29-68, in the device of Scholer a restriction, (spring-loaded valve 49) is situated in the flow path between the outlet of the reservoir and the inlet (pipe 47) of the chamber (16) holding the particles of the ion-exchange material (the zeolite 17).

9. CONCLUSION

For reasons thus given, it is considered that the rejection of Claims 4-9 under 35 U.S.C. 102(b) as anticipated by Scholer is without merit. It is therefore requested that this Honorable Board reverse the decision of the Primary Examiner and allow Claims 4-9, all the claims on appeal.

Respectfully submitted,

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CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited this date with the United States Postal Service as first-class mail in an envelope addressed to:

COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

On March 18, 2003

By Elissa De Luccy

9. A device for regenerating an ion exchange cartridge (16), which cartridge (16) is provided with an inlet (20) and an outlet (21), characterized in that the device is provided with a reservoir (2) for the accommodation of a solution (26) in which alkali metal ions and chloride ions are present, said reservoir (2) provided with an outlet (10) to which the inlet (20) of the cartridge (16) can be connected, a chamber (3), in which the cartridge (16) can be placed, provided in the device, said chamber (3) provided with an inlet (6) and an outlet (7), said inlet (6) of the chamber (3) being directly connected to the outlet (10) of the reservoir (2), said inlet (6) and said outlet (7) of the chamber (3) coupled to the inlet (20) and the outlet (21), respectively of the cartridge (16) when the cartridge (16) is placed in the chamber (30) and restriction (27) provided in the flow path of the solution situated between the outlet (10) of the reservoir (2) and the outlet (7) of the chamber (3).